PTO/SB/05 (08-03)
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| UTILITY |
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| PATENT APPLICATION |
| TRANSMITTAL |

(only for new nonprovisional applications under 37 CFR 1.53(b))

| spond to a collection of infor | mation unless it displays a valid OMB con | trol number. | |
|--------------------------------|---|--------------|---|
| Attorney Docket No. | 1857.1660000 | 0 | |
| First Inventor | Louis J. Markoya | | 5 |
| Title | Tunable Alignment Geometry | J.S. | Š |
| Express Mail Label No. | | - p | 3 |
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| | S | | ICATION ELEMENTS 00 concerning utility patent application | contents. | ΑD | DRI | ESS TO: | Mail Stop Paten Commissioner f P.O. Box 1450 Alexandria VA | or Patents | 0394 | |
|--|-------------|--|--|---|---|--------------|----------------------------------|---|-----------------------|-------------------------|--|
| | | (Submit an origina | al Form (e.g., PTO/SB/17) Il, and a duplicate for fee processing) | | 7. CD-ROM or CD-R in duplicate, large table or Computer Prog(Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission | | | | | | |
| 2. | | Applicant clair See 37 CFR 1. | ns small entity status. 27. | | (if applicable, all necessary) a. Computer Readable Form (CRF) | | | | | | |
| 3. | \boxtimes | Specification | [Total Pages 26 | | t | . Spe | cification Sequ | ence Listing on: | • | | |
| | | (preferred arrangement set forth below) - Descriptive title of the Invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D | | | | | i. 🔲 CD- | ROM or CD-R (| 2 copies); or | | |
| | | | | | ii. 🔲 paper | | | | | | |
| | | - Reference to sequ | uence listing, a table, ogram listing appendix | | c. Statements verifying identity of above copies | | | | | | |
| | | - Background of the - Brief Summary of | e Invention | | | | ACCOM | PANYING AF | PLICATION PA | RTS | |
| | | - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure | | 9. | × | Assignment P | apers (cover she | et & document(s)) | | | |
| 4. | \boxtimes | | 5 U.S.C. 113) [Total Sheets 13 | 3 _1 | 10. | | 37 CFR 3.73((when there is a | b) Statement in assignee) | Power of Attor | ney | |
| 5. | Oath | or Declaration | [Total Pages | 2 1 | 11. | | English Trans | lation Document | t (if applicable) | | |
| | | _ | cuted (original or copy) | | 12. | | Information D Statement (ID | | Copies of IDS | | |
| b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) | | | | | 13. | | Preliminary A | mendment | | : | |
| i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). | | | Signed statement attached deleting | nt attached deleting inventor(s) | 14. | \boxtimes | | rn Receipt Postca cifically itemized) | ards (MPEP 503) | | |
| | | | 3/ CFK | 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) | | | | | | | |
| | | | | | 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attack form PTO/SB/35 or its equivalent. | | | | | . Applicant must attach | |
| | | | | | 17. | \boxtimes | Other: Aut | horization under | 37 C.F.R. § 1.136(a) |)(3) | |
| | | | | | | \boxtimes | Other: The | name of the assi | ignee is: ASML Hold | ing N.V. | |
| | | | G APPLICATION, check approp Sheet under 37 CFR 1.76: | priate box, and sup | pply th | e requ | isite informatio | on below and in a | a preliminary amend | ment, | |
| | | Continuation inf | | uation-in-Part (CI | P) | of p | rior application Art | No:/ Unit: | | | |
| For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. | | | | | | | | | | | |
| | | | 19 | 9. CORRESPO | NDE | NCE | ADDRESS | | | | |
| | ⊠ ca | ustomer Number 2 | 6111 | | | | | or Correspo | ondence address below | | |
| NAME STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. | | | | | | | | | | | |
| Attomeys at Law | | | | | | | | · | | | |
| | DDRE. | 33 | 1. | STATE | Т | | | ZIP CODE | | | |
| COUNTRY TELEPHONE | | | | | | | | FAX | - | | |
| | | Print/Type) | Jason D. Eisenberg | | | D. | gistration No. (| Attornov/Accus) | 43,447 | | |
| | MINIE (| r inu i ypej | Pasolito Dischool & / | | | 1,46 | 5,01,4110,110, (4 | neyingenij | 1.5,777 | , | |

This collection of information of required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

10/30/03

Date



Robert Greene Sterrie Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael D. Lee Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcom Robert C. Millonig Lawrence B. Bugaisky Donald J. Featherstone Michael V. Messinger Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Ferro* Donald R. Banowit Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Virgil Lee Beaston* Kimberly N. Reddick

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*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

October 30, 2003

WRITER'S DIRECT NUMBER: (202) 772-8645 **INTERNET ADDRESS:** JASONE@SKGF.COM

Mail Stop Patent Application

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)

Appl. No. To Be Assigned; Filed: Herewith on October 30, 2003

For: **Tunable Alignment Geometry**

Inventor: Our Ref: Louis J. Markoya 1857.1660000

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

- 1. PTO Fee Transmittal (Form PTO/SB/17);
- 2. Credit Card Payment Form PTO-2038;
- 3. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
- 4. Authorization to Treat a Reply as Incorporating an Extension of Time under 37 C.F.R. $\S 1.136(a)(3)$;
- 5. Recordation Form Cover Sheet;
- 6. An original executed Assignment to ASML Holding N.V., recordation of which is hereby respectfully requested;
- 7. U.S. Utility Patent Application entitled:

Tunable Alignment Geometry

and naming as inventor:

Louis J. Markoya

Sterne, Kessler, Goldstein & Fox P.L.C.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents October 30, 2003 Page 2

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. An original executed Declaration;
- c. A specification containing:
 - i. 20 pages of description prior to the claims;
 - ii. 5 pages of claims (35 claims, 2 independent);
 - iii. a one (1) page abstract; and
- d. 13 sheets of drawings: (Figures 1-7, 8A, 8B, 9A, 9B, 10, 11A-11C, 12 and 13); and
- 8. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jason D. Eisenberg

Attorney for Applicant Registration No. 43,447

JDE/kim:mmb SKGF DC1;191985.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Louis J. Markoya

Appl. No. To Be Assigned

Filed: Herewith on October 30, 2003

For:

Tunable Alignment Geometry

Confirmation No.

Art Unit: To Be Assigned

Examiner: To Be Assigned

Atty. Docket: 1857.1660000

Authorization to Treat aReply a Incorporating a Extension of Time under 37 C.F.R. § 1.136(a)(3)

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jason D. Eisenberg
Attorney for Applicant

Registration No. 43,447

Date

10/30/03

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

SKGF_DC1;192021.1

Application Number

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision

| • | Filing Date | Herewith on October 30, 2003 | | | | |
|---|----------------------|------------------------------|--|--|--|--|
| | First Named Inventor | LouisJ. Markoya | | | | |
| | Examiner Name | To Be Assigned | | | | |

Applicant claims small entity status. See 37 CFR 1.27

Art Unit To Be Assigned

C mplete if Known

To Be Assigned

| TOTAL AMOUNT OF PAYMENT (\$)1080.00 | Attorney Docket No. 1857.1660000 | | | | | | | |
|---|--|----------------------|-----------|----------|--|----------------|-------------|----------|
| METHOD OF PAYMENT (check all that apply) | FEE CALCULATION (continued) | | | | | | | |
| ☐ Check ☑ Credit card ☐ Money Order ☑ Other** ☐ None | 3. AE | 3. ADDITIONAL FEES | | | | | | |
| ☐ Check ☐ Credit card ☐ Money Order ☐ Other** ☐ None ** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036. | Large | Entity | Sm | all Ent | ity | | | |
| □Deposit Account | Fee Code | Fee Fee (\$) Co | | • | Fee Description | | | Fee Paid |
| Deposit Account Number 19-0036 Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C. | 1051 | 130 | 2051 | 65 | Surcharge - late filing f | ee or oath | | |
| | 1502 | 50 | 2052 | 25 | Surcharge-late provision | | or cover | |
| The Commissioner is authorized to: (check all that apply) | | | | | sheet | - | | |
| ☐ Charge fee(s) indicated below ☐ Credit any over payments | 1053 | 130 | 1053 | 130 | Non-English specificati | | | |
| ☐ Charge any additional fee(s) during the pendency of this application | 1812 | | | 2,520 | | • | | ļi |
| ☐ Charge fee(s) indicated below, except for the filing fee to the | 1804 | 920* | 1804 | 920* | Requesting publication action | of SIR prior | to Examiner | |
| above-identified deposit account. | 1805 | 1,840* | 1805 | 1,840* | Requesting publication action | of SIR after | Examiner | |
| | 1251 | 110 | 2251 | 55 | Extension for reply with | nin first mont | :h | - |
| | 1252 | | 2252 | 210 | Extension for reply with | | | |
| FEE CALCULATION | 1253 | | 2253 | 475 | Extension for reply with | | | \vdash |
| 1. BASIC FILING FEE | 1254 | 1,480 | | 740 | Extension for reply with | | | |
| Large Entity Small Entity | 1255 | 2,010 | | 1,005 | | | | |
| Fee Fee Fee Fee Description Fee Paid | 1401 | | 2401 | 165 | Notice of Appeal | | | |
| Code (\$) Code (\$) | 1402 | | 2402 | 165 | Filing a brief in support | t of an annea | al | <u> </u> |
| 1001 770 2001 385 Utility filing fee \$770.00 | 1403 | | | | | | | |
| 1002 340 2002 170 Design filing fee | | | 2403 | 145 | Request for oral hearing | | | |
| 1003 530 2003 265 Plant filing fee | 1451 | 1,510 | 1451 | 1,510 | Petition to institute a pe | ublic use pro | ceeding | |
| 1105 160 2005 80 Provisional filing fee | 1452 | 110 | 2452 | 55 | Petition to revive - una | voidable | | |
| | 1453 | 1,330 | 2453 | 665 | Petition to revive - unir | ntentional | | |
| SUBTOTAL (1) (\$) <u>770.00</u> | 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reis | sue) | | |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE | 1502 | 480 | 2502 | 240 | Design issue fee | | | |
| Fee from Extra below Fee Paid | 1503 | 640 | 2503 | 320 | Plant issue fee | | | |
| Total Claims 35 - 20** = 15 X 18 = \$270.00 | | | | | | | | |
| Indep. Claims 2 - 3** = 0 X 86 = 00.00 | 1460 | 130 | 1460 | 130 | Petitions to the Commi | issioner | | |
| Multiple Dependent = | 1807 | 50 | 1807 | 50 | Processing fee under 3 | 37 CFR 1.17 | (q) | |
| Large Entity _I Small Entity | 1806 | 180 | 1806 | 180 | Submission of Informati | tion Disclosu | ıre Stmt | |
| Fee Fee Fee Fee Fee Fee Description Code (\$) | 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | | | \$40.00 |
| 1202 18 2202 9 Claims in excess of 20 | 1809 | 770 | 2809 | 385 | Filing a submission after 1.129(a)) | | | |
| 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claim, if not paid | 1810 | 770 | 2810 | 385 | For each additional inv (37 CFR 1.129(b)) | | | |
| 1204 86 2204 43 **Reissue independent claims | 4004 | 770 | 2004 | 005 | | | | |
| over original patent | 1801 | 770 | 2801 | 385 | Request for Continued | Examination | 1 (RCE) | |
| 1205 18 2205 9 **Reissue claims in excess of 20 | 1802 | 900 | 1802 | 900 | Request for expedited application | examination | of a design | |
| and over original patent | Other | fee (spe | sify) | | | | | |
| SUBTOTAL (2) (\$) <u>270.00</u> | | | | Filipa 5 | ee Paid | SUBTOTAL | | 10.00 |
| **or number previously paid, if greater; For Reissue, see above | **or number previously paid, if greater; For Reissue, see above * Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 | | | | | | | |
| SUBMITTED BY | | 4 41 | | | | Complete (if | applicable) | |
| Name (Print/Type) Jason D Eisenberg | Regis (Attor | tration N ney/Age | o. nt) | | 43,447 | Telephone | 10101 | f |
| Signature 3 dm | | | | | | Date | 10 36 | 03 |

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you replete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.